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U.S. ARMY CORPS OF ENGINEERS
LOUISVILLE DISTRICT



***Rough River Lake
project receives
national recognition
see page 3***



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On the cover: The tower at Rough River Lake, Falls of Rough, Ky.



Please conserve:
Think before you print.

Commander's Comments

Team,

As the summer draws to a close, we are faced with the reality that this recreation season was a difficult one. There were eight drownings at Louisville District locks and lakes, and none of the victims was wearing a life jacket. Despite the stellar work district staff does to spread the water safety message, we must continue to look for new ways to communicate the importance of water safety.

If you are in, on, or around the water, wear a life jacket; don't just carry one. Swim only in designated areas, and don't take chances by over-estimating your swimming skills. Never dive into lakes and rivers, and never swim alone. Boaters should take safety classes, be familiar with governing state laws, wear a life jacket, and have proper safety equipment onboard before boating.

I'd like to remind our visitors that alcohol is more hazardous on the water than on land. The stressors in a marine environment—motion, vibration, engine noise, sun, wind and spray—cause fatigue that can impair coordination, judgment and reaction time.

In a similar vein, I'd like to say a few words about workplace safety. Complacency and carelessness on the job can lead to injuries and fatalities. Needless tragedies can be avoided by following proper procedures. All employees and contractors should review the safety policies and procedures for their respective tasks.

Specifically, I call your attention to the policies that prevent the release of hazardous energy while employees are servicing machinery or equipment. Lockout/



Col. Luke T. Leonard
Commander and District Engineer
Louisville District
U.S. Army Corps of Engineers

tagout—the process of putting locks or tags on energy sources to keep them from being accidentally activated—prevents an estimated 120 fatalities and 50,000 injuries each year. We have had several electrical near-misses this summer, so I want you to be vigilant at work to protect our most valuable resources—each of you.

This issue of the Falls City Engineer highlights safe work practices throughout the Louisville District. Please take some time to review your safety standard operating procedures so that we can prevent the next accident.

Building strong!

Luke

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Rough River Lake project receives national recognition

Carol Labashosky, public affairs

The Louisville District's Rough River Lake has been named the U.S. Army Corps of Engineers' Natural Resources Management Project of the Year.

The 5,100-acre reservoir in Breckinridge, Grayson and Hardin counties in Kentucky was selected from among 422 Corps-managed lakes around the country. Rough River Lake was recognized for its accomplishments in management efficiency, public involvement, water safety, management effectiveness, partnerships, environmental stewardship and environmental compliance as related to the Natural Resources Management Program.

The award also recognized outstanding achievement by the Rough River Lake staff members: Diane Stratton, park manager; Adam Warren, lead ranger; J.D. Tucker, Adam Taylor and Adam VanZant, rangers; Tammy Simpson, office administrator; Brittany Ford, office clerk; Layman Lucas, maintenance leader; Clifton Escue and Mark Cardwell, maintenance mechanics; and Steve Clemons, Tom Dennison and Tim McQueen, maintenance workers.

"The synergy of the project's programs and the staff's motivation to excel is extraordinary," said Pat Hull, operations manager for the Green River Area, "Rough River has an energetic, highly focused leader in manager Diane Stratton. She energizes everyone and is a tremendous asset to the project and the Louisville District."

Rough River Lake's award nomination package reads, "The project maintains quality recreational facilities, resulting in safe and healthful outdoor recreational opportunities. Safety awareness programs have been revolutionized by thinking 'outside-the-box' and creating initiatives that serve the public on national, regional and local levels."

One of the staff's crowning achievements is its water safety program. A plan originated by the Rough River Lake staff—the NASCAR Water Safety Campaign—took the entire Corps down an innovative pathway.

"We recognized the need to find a new avenue to reach young males ages 18 to 35, who represent a large percentage of water based recreation related fatalities,"



Visitors to Rough River Lake prepare for the Cardboard Boat Regatta in June 2012.

said Stratton.

An interactive water safety exhibit space during the NASCAR Camping World Truck series events at Kentucky Motor Speedway enabled the Corps to promote this message: "Just like your favorite drivers wear their protective gear when they are racing, the U.S. Army Corps of Engineers wants you to wear your protective gear when you are on the water. Your life jacket is your protective gear." Other districts were able to tag-team onto the plan as the NASCAR series moved around the country.

"The Rough River Lake team showed tremendous initiative to launch this campaign," said Hull.

Rough River Lake also has aggressive outreach campaigns. More than one million visitors enjoy recreation at the project site each year, providing economic stimulus for surrounding rural communities and many opportunities for public involvement. Throughout 2011, rangers interacted with 21,537 students, scouts, and adults. In the same year, more than 200 volunteers provided assistance and contributed 4,062 volunteer hours—a cost-savings to the government of \$15,000.

Among Rough River Lake's other notable achievements are project facility upgrades to infrastructure, which distinguished the project and enhanced the public's experience, and a commitment to sustainability. The project also has a cooperative agreement with Friends of Rough River Lake, Inc. The two entities officially formed a bond to promote lake recreation, history, and notably, the operation of a

Visitor/Outdoor Learning Center facility.

"This partnership provides the foundation for increasing the community involvement in the stewardship of Rough River Lake," said Stratton. "This distinction would not have been possible without the support of the Friends of Rough River Lake, Inc., and the community here at Rough River Lake."

Rough River Lake's shoreline management plan, which provides ground rules for how government property can be used by adjacent landowners, is administered by the rangers and represents a large part of the project's workload. With over 2,267 dock permits, 1,402 mowing/footpath permits, and 288 licenses, Rough River Lake has the most extensive shoreline management program in the Louisville District.

"The Louisville District Corps of Engineers and the local communities and customers benefiting from the facilities and work at Rough River Lake can be proud of the accomplishments and national recognition for excellence that the lake has received," said Hull. "The staff continues innovative thinking to set even higher goals for excellence in all facets of project programs. The 2012 Project of the Year is an outstanding achievement and a proud moment for staff and community alike."

Stratton accepted the award on behalf of the Corps of Engineers Rough River Lake staff Aug. 6 at a national senior leadership meeting in Little Rock, Ark.

Diane Stratton

Louisville team named USACE Project Delivery Team of the Year for Human Performance Wing at Wright-Patt

Katie Newton, public affairs

The Louisville District was awarded the U.S. Army Corps of Engineers 2012 Project Delivery Team (PDT) of the Year for Merit award for its work on the Human Performance Wing (HPW) at Wright-Patterson Air Force Base in Ohio during the Strategic Leaders' Conference National Awards Ceremony Aug. 6 in Little Rock, Ark.

The HPW project team was recognized for safely completing the largest single Corps' construction contract executed at Wright-Patterson Air Force Base since World War II as part of the Base Realignment and Closure Program (BRAC).

"This was a huge mission that resulted in a wonderful facility," said Louisville District Commander Col. Luke Leonard. "We are very proud of this team, and especially of our Air Force partners at Wright Patterson and our engineering and construction contractors who made it possible."

The team was commended for developing and employing innovative technology and business processes to complete the project 89 days ahead of schedule, under budget and within quality standards. Headquarters applauded the PDT for its

superior coordination and customer relations, which allowed for early occupancy of the facility.

"Everything that needed to go right came together on this one," said Dewey Rissler, project manager and Louisville District Military Branch Air Force Section Chief. "I've never been involved in a project where every team member all had the same goals, the same focus and the same desire to achieve what we did."

The project consolidated four Air Force and Navy organizations from three different locations into a single highly complex and technical facility for 1,800 military and civilian personnel, known as the 711th Human Performance Wing.

"It was quite a challenge to combine so many different organizations," said Rissler. "But we were very lucky with the personnel that the base put on the project. They really worked with the users to identify their specific needs upfront. Those guys worked tirelessly on the coordination efforts," he said.

The complex is a massive 670,000 square ft., \$238.8 million undertaking that took less than three years to construct. It houses many technical Department of Defense (DoD) components, including the Navy's disorientation device and the



Todd Hornback

The state-of-the-art Air Force Centrifuge under construction in 2009. The centrifuge is one of only four of its kind in the world.

state-of-the-art Air Force Centrifuge—one of only four in the world.

Additionally, the project managed to achieve a LEED Silver status and identified a \$54.8 million savings through value engineering.



David Partridge

The Human Performance Wing project at Wright-Patterson Air Force Base in Ohio is a massive 670,000 sq. ft. facility that houses more than 1,800 military and civilian personnel.

Corps breaks ground for Connecticut Reserve Center

Carol Labashosky, public affairs

The groundbreaking ceremony for the Danbury Armed Forces Reserve Center (Newtown), Conn., was held July 8.

The project site had changed due to local and political challenges which took many meetings and negotiations, said Diane McCartin, USACE Louisville District Project Management, Army Reserve. "After much hard work by the project team, an agreement was reached to construct on the southern portion of the Lee Farms site, a contract was awarded and the contractor mobilized on site," she said.

"The district's work has been impressive as was the ground breaking ceremony," said Lt. Col. Joe Danao, construction and facilities management Connecticut Army National Guard, in an email. "Having two U.S. senators, Joe Lieberman and Richard Blumenthal, in one place for the event is extraordinary, and it speaks to the team work put forth under the Louisville District project team led by Greg Cardwell."



Greg Cardwell

From left to right are Maj. Gen. William Waff, Commanding General, 99th Regional Support Command; Sen. Richard Blumenthal; Sen. Joseph Lieberman; Stephanie Podewell, Congressional Aide to Rep. Chris Murphy; and Maj. Gen. Thaddeus Martin, Adjutant General, Connecticut National Guard. Also in attendance was Col. Charles Samaris, Commander, New England District.

Spotlight

Hydropower convention comes to Louisville

Carol Labashosky, public affairs

On July 17-20 Hydro-Vision International 2012 convened in Louisville, Ky. The event is the largest gathering of hydropower professionals, with more than 3,000 delegates and more

than 300 exhibiting companies. Louisville District Commander Col. Luke Leonard (right) provided welcoming remarks and participated in the unveiling of the Wall of Honor, recognition of participants in the HydroVision/Hydro industry who have military backgrounds or have military

family members serving America.

The conference guest speakers addressed how the nation has to look at fuel diversity, and that hydropower is the wave of the future. The regulatory process involves the Army Corps of Engineers working with the Federal Energy Regulatory Commission to permit companies who want to construct hydropower facilities on Corps dams. Ken Lamkin, Louisville District Hydropower Coordinator (Engineering Division), lead a multi-disciplinary team that worked with American Municipal Power in the review process, ensuring its dam construction plans met Corps requirements and maintaining structural integrity of Corps projects.

Marc Gerken, AMP, said that consumers of energy are concerned with sustainability. "They want to see how reducing carbon found in traditional fossil fuels, can be explored with hydropower, with a more streamlined process – which the Corps is also interested in doing."



Carol Labashosky

Corps completes 14-year environmental cleanup at Marion Engineer Depot



The new Marion Harding High School stands as a symbol of one of the biggest milestones in the environmental cleanup at the former Marion Engineer Depot in Marion, Ohio. Two local schools were relocated so that subsurface remedial actions could take place at the site.

23 groundwater monitoring wells placed throughout the property.

Testing showed that the contaminants found in the subsurface soil on the property were not a health threat to the students. "All agencies agreed that the students weren't at risk," said Brancato. "Removal technology of the subsurface soil contaminants would require an enclosure, but just the appearance of bringing contaminated subsurface soil to the surface would strain the suspicions that the students had by being on the River Valley School campus. Therefore, the schools were relocated and the former MED property was restored."

The relocation of the Marion Harding High School and the River Valley Middle School, part of RVLSD, in 2003 was one of the biggest milestones in the project. "It was definitely one of our biggest challenges," said Brancato. Ultimately, Congress allowed the Corps of Engineers to pay \$15 million toward the relocation of the schools.

The investigation for radiological sources on the property began with the Ohio Department of Health Radiation Protection surveying soils and buildings on River Valley School property for radioactivity. That investigation discovered a dime-sized disk, containing radium, in the subsurface soil in front of the high school that was presumably used by the Army to mark positions of bridges and vehicles so troops could see them during nighttime operations. The survey also located a rock in a science classroom that had a low level of radiation, and was later removed. Congress requested a full search of the former MED property to determine if there was a definitive source of radioactive material that could be a possible link to the cases of leukemia. "One of the most thorough Multi-Agency Radiation Surveys was conducted and the investigation was negative" said Brancato.

The Concerned Citizens Group at Marion needed help to assimilate all the investigative data to determine whether there was a link to the approximate seven graduates from River Valley Schools that were diagnosed with leukemia. The Restoration Advisory Board (RAB) assembled to provide input on the cleanup program

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In 1942, the War Department acquired 654 acres of farmland for the U.S. Army Corps of Engineers to construct an engineering equipment storage depot in Marion County, Ohio. The Marion Engineer Depot (MED) began operation during WWII and continued for approximately 15 years thereafter. During its operation, the MED was the largest depot of its type in the United States.

The former MED was constructed for the purpose of storing, maintaining, and renovating heavy construction machinery for the U.S. Army. There were five large warehouses, three sheds, a maintenance area, 22 miles of railroad, six streets, four avenues and a headquarters area.

During WWII, the depot also housed up to 300, mostly German, prisoners of war at Camp Marion. After the war, the mission of the depot changed, and it began stocking strategic materials for the Treasury Department. It transformed again during the Korean War and increased the amount of heavy equipment it rebuilt.

Katie Newton, public affairs

After more than 14 years of investigative and cleanup activities, the former Marion Engineer Depot (MED) in Marion, Ohio, was deemed environmentally restored and No Further Action (NFA) is necessary. The environmental remediation process followed the federal Comprehensive Environmental Restoration Compensation and Liability Act (CERCLA) for Formerly Used Defense Sites.

"The magnitude of this project was extraordinary," said Dr. David Brancato, Louisville District Human and Ecological Risk Assessor who has been involved with the project since its beginning. Soil, air, water and sediment around the schools located on former MED were investigated to determine if any current and future risk existed to the students and staff of the Riv-

er Valley Local School District (RVLSD). "The investigation at MED was one of the most thorough federal and state agency response actions to date," said Brancato.

The environmental investigation began in 1997 when RVLSD expressed concern that there was a high rate of leukemia among its graduates. The seven cases of leukemia represented a statistically significantly higher number than national rates, and therefore the Ohio Department of Health recommended thorough testing for potentially toxic substances on the site and adjacent areas.

During the course of the investigation several technical strategies were used for sampling at MED. Methods included ambient air monitoring in the athletic fields and on top of the middle school, more than 1,100 soil borings and samples, and

at former MED and provided the citizens of Marion with support tools they needed throughout the process.

Next, the Corps continued with the CERCLA process through site inspections and later remedial investigations of areas suspected of contamination. One area was a former waste disposal area, where the Army disposed of and burned fuels and solvents in trenches. "Disposal practices weren't as restrictive at the time of disposal as they are today," said Brancato. "There were no laws regulating the use of these chemicals when the depot was open, so if it was waste, then it was buried." Testing showed that these contaminants were not reaching the surface air, or the groundwater because of the tight soil clays that prevented movement of the contamination.

Continuing with the CERCLA process, an evaluation was made for removal of the subsurface contaminants. Thousands of tons of dirt were removed with the excavated area backfilled with acceptable soil and capped to seal it. "The cap is working as designed," said Brancato.

The remediation allowed the land to be rezoned for industrial purposes. "The property was bought by a commercial entity, making a viable contribution to the Marion Commerce Center," said Brancato. "It's just another one of the benefits of the cleanup."

Even though the cleanup in Marion had

been at the center of public and congressional interest, citizens were appreciative of the Corps' efforts to ensure protection of human health and the environment.

"Thank you, guys," said Ted Graham, a community Restoration Advisory Board (RAB) member as the RAB dissolved, "You built a new school because of the stigma that was attached to the location. Not only that, but you came in and solved even more problems."

Even though the cleanup is complete, the Corps will still perform Long-Term Monitoring (LTM), and the required CERCLA 5-year reviews, of the site. The first 5-year review of Operable Unit-1—the

area used by the schools for their athletic fields—was completed in 2009 with the next review scheduled in May 2014. "We determined from 2009 that the remedy is effective and the consensus was to decommission all but three groundwater wells because they are no longer needed," said Brancato.

The success at MED was possible through partnerships among the Corps of Engineers, Agency of Toxic Substances and Disease Registry, Ohio EPA, Ohio Department of Health, Ohio Department of Health Radiation Protection, who worked together to address concerned citizens.



Remedial work on the Operable Unit-1 in April 2005 removed thousands of tons of dirt from the area used by the local school for their athletic fields. The area was excavated and backfilled with acceptable soil and sealed with a cap. Today, the area is used for industrial purposes.

USACE

History

Drought reveals razed town submerged 45 years ago

John Neville, public affairs

It's been 45 years since anyone has seen the small town in northeastern Indiana in the summertime. Although parts of Monument City are typically visible during the winter when water levels are low, the town has spent summers at the bottom of the Salamonie Lake since 1967.

The federal government purchased the city and intentionally flooded it to make way for the construction of the Salamonie Lake reservoir. The U.S. Army Corps of Engineers has built scores of these man-made lakes around the country in an effort to manage flood risk.

This summer, a severe drought has taken its toll on water levels around the nation. The lake was between 13 and ten

feet below summer pool this year. The low level exposed parts of the old town and spurred the curiosity of former residents and their descendents and the interests of others with little or no connection. While the Corps removed the majority of the town's razed debris and moved the cemetery outside Corps property, dead trees, bricks, glass, tile, wooden posts and even the foundation of the town's three story K-12 school remain.

The area that eventually became Monument City was first inhabited by Miami and Osage Indians. In 1834, Jacob Fisher and his family settled in the area. In 1869, the town paid \$500 for the construction of a monument bearing the names of the 27 men from the area who died in the Civil



A woman stands with a Mound City High School letter jacket her father earned playing basketball. He graduated with the Class of 1939.

L. Fager, IDNR

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War. The monument stood in the center of the town that was named after the structure in 1876.

As of 1952, the city had about 13 homes, a population of 37, the three-story school, an iron bridge that led out south of the city and crossed the Salamonie River, an auto repair garage, church, a general store with two long benches where the community would gather to chat, and a gas pump.

"You could get a bottle of pop for ten cents," said Lynnanne Fager, an interpretive naturalist with the Upper Wabash Interpretive Center. "It was very Norman Rockwell."

Today, the only signs of the old Monument City are the school's foundation, rocks, glass and other debris, but it's enough to draw public interest. People began wandering the exposed parts of the town and collecting artifacts, which is illegal under federal law. The Indiana Department of Natural Resources decided to close the site to preserve what remains.

"Removal of artifacts—which would include a brick, a piece of pottery or any other object that was made or placed by humans—removes a part of the story of the people who lived at the site," explained Ginger Murphy with the Indiana Department of Natural Resources. "When artifacts are moved or removed from a site, it can leave unexplainable gaps in our understanding of places and the people who lived there...If everyone who visited picked up a brick or some other artifact and took it home, we would lose a lot of the pieces of the puzzle. And many people

were picking up artifacts to take home illegally as souvenirs."

The interest in the exposed parts of the past persuaded state agencies to conduct tours of the area. Hundreds of people, including some from as far away as Texas and Louisiana, have made their way to the city that was submerged for 45 years. Fager, who has been part of the tours, said the walks have been filled with emotion.

"One gal came yesterday, and she had her father's letter sweater and his high school diploma he received from that school," she said. "He was from the graduating class of 1939. It was like he couldn't be there so she brought that with her and had her picture taken with it. There was a lot of sentimentality in the aura. Some people teared up; some were really excited to be there this time of year. Many people brought family photo albums of the town and were willing to share with the people who were there out of curiosity. A lot of people were grateful for the history lesson."

Former resident Mary Jo Wright, who took the tour Aug. 8, recalled her childhood memories in Monument City.

"We had a grocery store there from 1944-1948," Mary Jo Wright recalled. "I lived there just those four years; I was 6-10. We walked to school and walked home. We had to walk home every day at lunch and sell candy bars to the kids at the grocery store. I could make change when I was six years old. A dime, a nickel or a penny, I knew what to sell them. We also painted the fence around the monument every year. We had a pony we'd ride, too.



L Fager, IDNR

In 1869, the town paid \$500 for the construction of a monument bearing the names of the 27 men from the area who died in the Civil War. The monument stood in the center of the town that was named after the structure in 1876. It now stands in the relocated cemetery.

There was also a man who lived behind the grocery store who had a trick dog. There were people who came from everywhere to watch that dog."

The tour was also a chance to inform the public about flood risk management.

"A lot of people in the area don't know why the reservoirs were built and the impact they have had not only on the towns and people at Salamonie but the entire United States," Fager said.



L Fager, IDNR

The receding level at Salamonie Lake has exposed parts of what was Monument City and spurred the curiosity of former residents and their descendants.